



An Empirical Investigation of Economic Crisis's Impact on Consumer Behaviour in Bulgaria – Changes of Spending, Saving and Bank Credit Taking

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1. INTRODUCTION

This paper presents the results of an academic research project organized by The University of National and World Economy, Sofia, Bulgaria. The main goal of the research project is to analyse the changes in consumer behaviour in circumstances of economic crises, the direction of these changes and sustainability of changes in consumer behaviour.

The more specific research objectives include answering the following questions:

- Does a change occur in quantity and frequency of consumption of certain products and services in Bulgaria in conditions of economic crisis?
- Do consumers change their buying pattern by choosing lower quality at lower prices?
- What are the similarities and differences of between fast moving consumer goods (FMCG) and durable goods from the point of view of changes of consumer behaviour in conditions of economic crisis?
- How consumers change their attitudes towards savings?
- What are the consumers' attitudes towards taking loans?
- How the market segmentation does looks like from the point of view of changes in consumer behaviour during economic crisis?

2. METHODOLOGY

The **data collection method** includes structured personal interviews. Interviewing gathered data about consumers' behaviour and consumers' choices as well as changes in consumers' behaviour in a period of economic crisis. The research questionnaire consists of five sections.

- The first section is designed to gather data about households' consumption. The specific product/service groups which are investigated are the following: food (meat, fish, soups, salads, fruits); clothes; shoes; electricity, water; heating; entertainment, etc.
- The second section of our research questionnaire includes questions concerning the purchases and possession of durable goods (cars, TV sets, phones, computers, refrigerators, etc.). Special topics of interest in this second section are the postponed purchases of durable goods

ABSTRACT: This paper presents the results from a survey-based market research of Bulgarian households. The author of the study is trying to understand what changes of consumer behavior occur in times of economic crises in Bulgaria, do consumers change their buying patterns, how consumers attempt to avoid or diminish the negative results from economic crisis, etc. The research project is planned, organized and realized within the Scientific Research Program of The University of National and World Economy, Sofia, Bulgaria. This paper discusses only a part of the research results and analysis. The rest of the research results will be published in a separate paper.

KEY WORDS: consumer behavior, economic crisis, consumption

(by product categories) and the decreasing of consumption of FMCG (foods, detergents, tooth paste, cigarettes, etc.).

- The third section of questionnaire includes questions gathering data about consumers' behaviour and attitudes towards credits and savings.
- The fourth section of questionnaire is designed to gather data about the practice of preparing homemade foods and drinks by Bulgarian households. Special point of interest in our research is the change of amount and variety of products prepared "homemade" in conditions of economic crises (compared to the times before crisis).
- The final section of questionnaire asks questions about consumers' age, education, income and other demographic data.

The **sample size** is 2000 Bulgarian households. The method of area sampling was applied.

3. PREVIOUS RESEARCH

The newest American experience in studying consumer behavior in times of economic crisis is represented by a joint research project realized by Deloitte and Harrison Group, named „The 2010 American Pantry Study: the New Rules of the Shopping Game“ (A Joint Report from Deloitte and Harrison Group, 2010). Besides the numerous facts, published in this study, much interests attracts the four basic types of shopping behavior. The authors of the research project call them "Four Shopper Decision Strategies: New Rules in a Changed Game". The Deloit/Harrison Group identified the following market segments from the point of view of consumers' "attitudes and resourcefulness":

- **"Super Savers"** manage their resourcefulness at the cash register, hunting for and taking pleasure in savvy price management through extensive coupon collection.
- **Sacrificers** manage resourcefulness at the shelf, selecting among competing products on the basis of unit price, shopping more store brands and eliminating convenience shopping.
- **Planners** address resourcefulness through pantry management where they plan out meals, accept bulk pack discounts and set fixed spending limits.
- **Spectators** are the most loyal to national brands and were the least impacted by the recession, but still strive to be resourceful. Their pursuit of value still allows room for specialty goods, but they

learn how to save by taking advantage of in-store discounts." (Deloitte and Harrison Group, 2010).

European research experience in the field of consumer behavior during economic crises can be presented by an interesting study organized and realized by McKinsey Global Institute (MGI) and Consumer and shopper insights (CSI). The scope of the research project encompassed Germany, UK, France, Italy, and Poland. In 2008 in these 5 countries quantitative and qualitative data was gathered. The analysis revealed 5 typical consumer reactions or modifications of consumer behavior in times of economic crises. The team of the project called these modifications "tactics in response to reduced purchasing power". The first three tactics are connected with the purchased volume by shoppers and they are: "control spending", "replace only when needed", and "do it yourself". The other two tactics are oriented towards the price – "shop smarter" and "seek value" (McKinsey Global Institute, 2009).

In 2010 in Bulgaria a research project aimed towards the segmentation of Bulgarian consumers was realized (Пазарен компас, 2010). The researchers identify 7 market segments from the point view of consumers' life styles. This research partially studied the consumer behavior in times of economic crises. The conclusions of this research project cover expectations of Bulgarian consumers for 2010, changes in income, etc.

Our research objectives include more detailed intentions towards studying changes in consumer behavior in times of economic crises – i.e. changes in consumption of fast moving consumer goods, as well as durable goods, changes in consumer behavior, changes in propensity to saving and to take credits, purchase, producing homemade foods and drinks, etc.

4. DATA ANALYSIS

4.1 Consumption of Major Product Categories in Year 2010 and Year 2009 – A Comparison

Research data in Fig. 1 indicates that the most significant decrease of consumption in 2010 compared to 2009 is observed within the product categories of meat (17%), fish (11,5%), and fruits (8,5%). The percentages of respondents who have answered that their consumption of salads and soups have diminished in year 2010 compared to year 2009 are: 6% (for salads) and 4,4% (for soups).

FIGURE 1

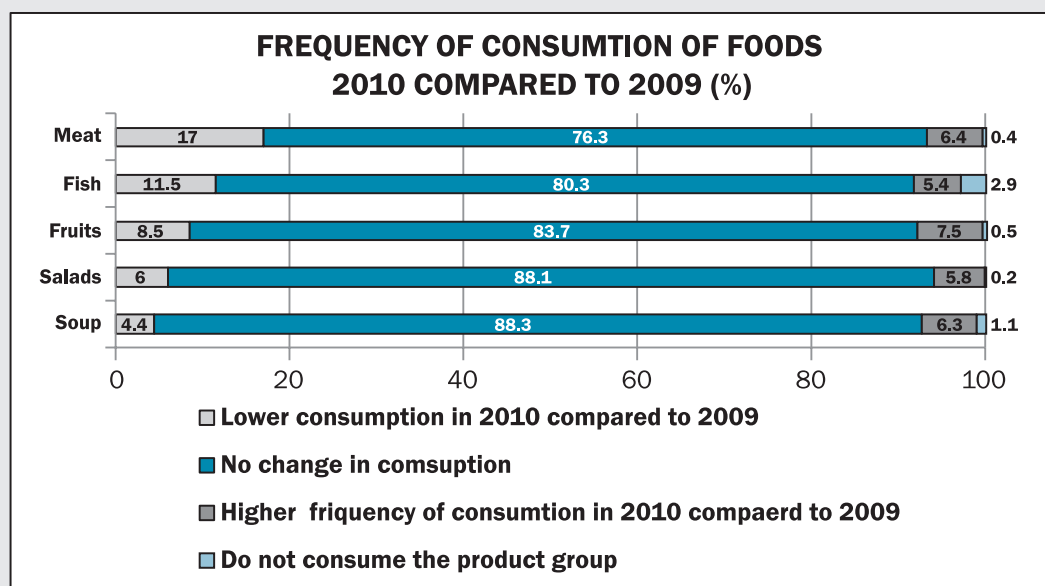


Fig. 2 presents information about household consumption of major product categories. As can be seen the most considerable reduction is observed in entertainment – in 2010 over 55% of households have reduced their expenditures for entertainment. Nearly half of respondents has lowered their spendings for clothes – 47,8%. Almost the same reduction is observed in the category of shoes – 44,7% of respondents declared they have reduced their spending for shoes in 2010 compared to 2009. About 22% of interviewed household members answered that their households have decreased their consumption of electricity and

heating in year 2010 compared to year 2009. Also 16,8% of respondents confirm they have reduced their consumption of food in 2010 compared to 2009. The reduction of consumption of water is declared by 14,6% of respondents.

4.2 Households' Expectations of Future Changes in Consumption – A Geographic Point of View

Table 1 presents data about households' expectations of changes in consumption of electricity, water, heating, food, clothes, shoes, and entertainment. Data was

FIGURE 2

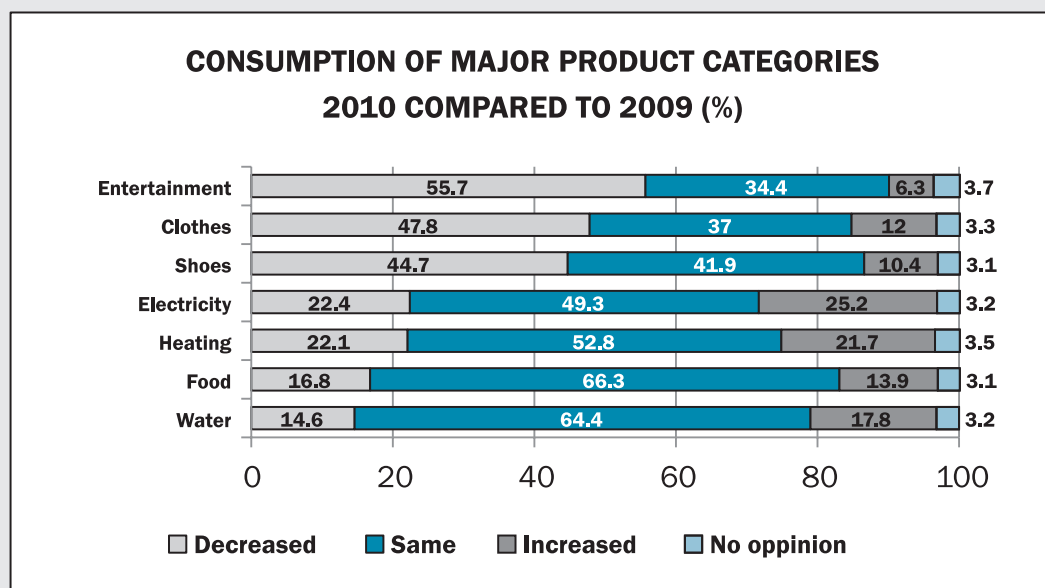


TABLE 1. Households' expectations of changes in consumption in 2011

PRODUCT CATEGORY		LOCATION	SOFIA	BIG CITIES (REGIONAL CENTERS)	OTHER CITIES	VILLAGES
Electricity	Will decrease		11,40%	21,60%	24,00%	25,90%
	Will remain the same		65,90%	62,30%	57,10%	56,30%
	Will increase		16,50%	10,70%	13,40%	12,20%
	No opinion		6,20%	5,40%	5,50%	5,60%
	Total		100%	100%	100%	100%
Water	Will decrease		8,10%	13,70%	18,90%	20,00%
	Will remain the same		71,10%	73,60%	61,50%	60,40%
	Will increase		12,70%	7,20%	13,10%	12,10%
	No opinion		8,10%	5,50%	6,50%	7,50%
	Total		100%	100%	100%	100%
Heating	Will decrease		14,60%	19,40%	23,00%	23,30%
	Will remain the same		63,20%	63,40%	57,90%	58,60%
	Will increase		13,80%	9,20%	13,60%	12,40%
	No opinion		8,40%	8,00%	5,50%	5,70%
	Total		100%	100%	100%	100%
Food	Will decrease		9,70%	14,50%	19,40%	23,70%
	Will remain the same		66,20%	66,80%	67,20%	61,60%
	Will increase		16,80%	12,30%	9,80%	12,90%
	No opinion		7,30%	6,40%	3,60%	1,80%
	Total		100%	100%	100%	100%
Clothes	Will decrease		23,00%	35,40%	44,80%	39,80%
	Will remain the same		50,50%	41,20%	38,20%	44,90%
	Will increase		17,00%	15,30%	9,60%	11,80%
	No opinion		9,50%	8,10%	7,40%	3,50%
	Total		100%	100%	100%	100%
Shoes	Will decrease		33,10%	43,70%	39,80%	22,20%
	Will remain the same		46,60%	39,30%	42,90%	51,10%
	Will increase		11,90%	9,60%	13,70%	16,20%
	No opinion		8,40%	7,40%	3,60%	10,50%
	Total		100%	100%	100%	100%
Entertainment	Will decrease		30,50%	41,10%	48,10%	39,80%
	Will remain the same		43,00%	35,70%	36,80%	49,40%
	Will increase		15,70%	14,60%	7,70%	7,30%
	No opinion		10,80%	8,60%	7,40%	3,50%
	Total		100%	100%	100%	100%

gathered by the question “What are your expectations of consumption of ... for 2011?”

As can be seen (*Table 1*) there is a considerable difference between expectations of people living Sofia and expectations of people living outside Sofia. If we point our attention to electricity we can see that 11.40% of households situated In Sofia expect to decrease their consumption of electricity while 25,90% of households situated in villages expect the same (the difference is statistically significant). For households

living in big cities this percentage is 21,60% and for households living in small Bulgarian cities is 24%.

Households' expectations of water consumption have the same geographic model as the electricity. Only 8,10% of Sofia households expect to decrease their consumption of water while this percentage is two times higher for households living in Bulgarian villages (20%). For households situated in small Bulgarian towns this level is pretty close to the level of villages – 18,9%. The percentage of people living in

the big Bulgarian cities the percentage is 13,70% (the cited percentages are statistically different).

The same geographic model of expectations of consumption in 2011 is observed for heating, food and clothes. The proportion of respondents expecting a decrease of consumption of heating in 2011 are: for Sofia – 14,6%; for big cities (regional centers) – 19,40%; for small cities and villages – 23% (the differences are statistically significant).

Similar situation is observed while interpreting expectations of changes in consumption of food in 2011. The proportion of respondents expecting a decrease of consumption of food in 2011 are as follows: for Sofia – 9,70%; for big cities (regional centers) – 14,50%; for small cities – 19,40%; for villages – 23,70% (the differences are statistically significant).

The analysis of expectations of households' consumption of clothes, shoes, and entertainment indicates that Bulgarian consumers tend to reduce the consumption of these categories vastly compared to electricity, water and heating. Consumers' expectations of changes in consumption of clothes are the following: 23% of Sofia households expect a decrease in consumption of clothes in 2011; for big Bulgarian cities this level is 35,4%; for small cities – 44,80%, for villages – 39,80% (the differences are statistically significant). Respondents' expectations of shoes consumption are the following: 33,10% of households living in Sofia expect a reduction of consumption; for big Bulgarian cities this level is 43,70%; for small Bulgarian cities the level is 39,80%, and for villages – 22,2% (the differences are statistically significant). Expected reduction of consumption connected to the product category of entertainment is: for Sofia – 30,50%; for big cities – 41,10%, for small cities – 48,10%, and for villages – 39,80% (differences are statistically significant).

While analyzing the numbers presenting the expectations of consumption of clothes, shoes and entertainment we can notice that households situated in Bulgarian villages expect smaller reduction of consumption of these three categories compared to households living in other Bulgarian cities (except the regional centers). For clothes – 39,80% of households in Bulgarian villages expect a decrease in consumption against 44,80% in other Bulgarian cities. For shoes – 22,20% of households in villages expect a decrease in consumption compared to 39,80% of households in other Bulgarian cities. For entertainment the percentages are 39,80% (villages) against 48,10% (other Bulgarian cities) (the differences are statistically significant).

One possible explanation of the figures mentioned above is that people in Bulgarian villages have already reduced their costs for clothes, shoes, and entertainment. And this reduction is meaningful ante there is not much room for further decrease. That's why their expectations of reduction in consumption are not as high as the expectations of households living in other Bulgarian cities.

4.3 Changes of Consumers' Income in Year 2010 Compared to Year 2009

The distribution of respondents' answers to the question "How did the income of your household change in 2010 compared to 2009?" is presented in Figure 3.

Over 1/3 (33,6%) of respondents' answers indicate that household income has decreased in 2010 compared to the income in 2009. The percentage of respondents who answered that their income has increased is 18,4%. This level is nearly two times lower compared to the level of 33,6%. Over 44.1% of respondents confirm that their income in 2010 remained the same as the income in 2009. The answer "no opinion" is given by 4% of respondents.

A considerable reduction of households' income in 2010 compared to 2009 is expected in Sofia – 23% of respondents expect this income change. Lower level of income reduction is expected in Bulgarian villages – 13,10% of respondents answer that their income will decrease in 2011. About 19% of households living in Bulgarian cities expect that their income will decrease in 2011. It is interesting that a relatively small proportion of respondents living in Bulgarian villages expect that their income will decrease in 2011. A realistic ex-

FIGURE 3

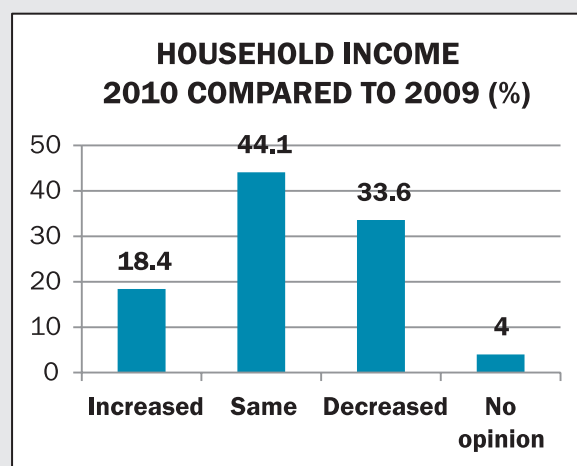


TABLE 2 Expectations of income change in 2011 – a geographic point of view

INCOME \ LOCATION	SOFIA	BIG CITIES (REGIONAL CENTERS)	OTHER CITIES	VILLAGES
Will decrease	23,00%	19,00%	19,70%	13,10%
Will remain the same	36,20%	46,60%	36,60%	51,60%
Will increase	34,90%	31,60%	41,50%	29,60%
No opinion	5,90%	2,80%	2,20%	5,70%
Total	100%	100%	100%	100%

planation of this fact is that many retired people as well as unemployed live in Bulgarian villages. Probably their answer to the question about income expectations is the reason for the big difference between Sofia and other cities from one side and from the other – the Bulgarian villages.

As shown in Table 3 respondents without serious education are less optimistic about their income in 2011. About 22% of uneducated respondents believe their income will increase in 2011. Over 36% of respondents with middle school diploma are expecting their income will increase in 2011. This level among respondents who have a university diploma is 31,7%

4.4 Taking Bank Credits, Borrowing Money and Buying Goods by Installments

The data concerning bank credits, borrowing money from friends/relatives, and buying goods by installments was gathered by several consecutive questions of that kind: “During year 2009 (2008) did you take bank credit/borrow money from friends or relatives/ buy goods by installments?” The observed time period is 2008/2009 but not 2009/2010 because these data was gathered on the first stage (the pilot study) of the research project.

The interpretation of the numbers, presented on Fig. 4, indicates that a substantial decrease of bank credits is observed: in year 2008 over 38% of respondents confirm that they have taken a bank credit whilst in year 2009 less than 30% of respondents confirm

that they have taken a bank credit. This difference is statistically significant.

The shares of respondents who have answered that they did buy goods by installments are 25% (year 2008) and 24% (year 2009). The shares of respondents who have confirmed that they have borrowed money from friend or relatives are 22,1% (year 2008) and 23,4% (year 2009). These differences however are not statistically significant.

4.5 Changes of Consumer Behavior in Bulgaria in Times of Economic Crisis

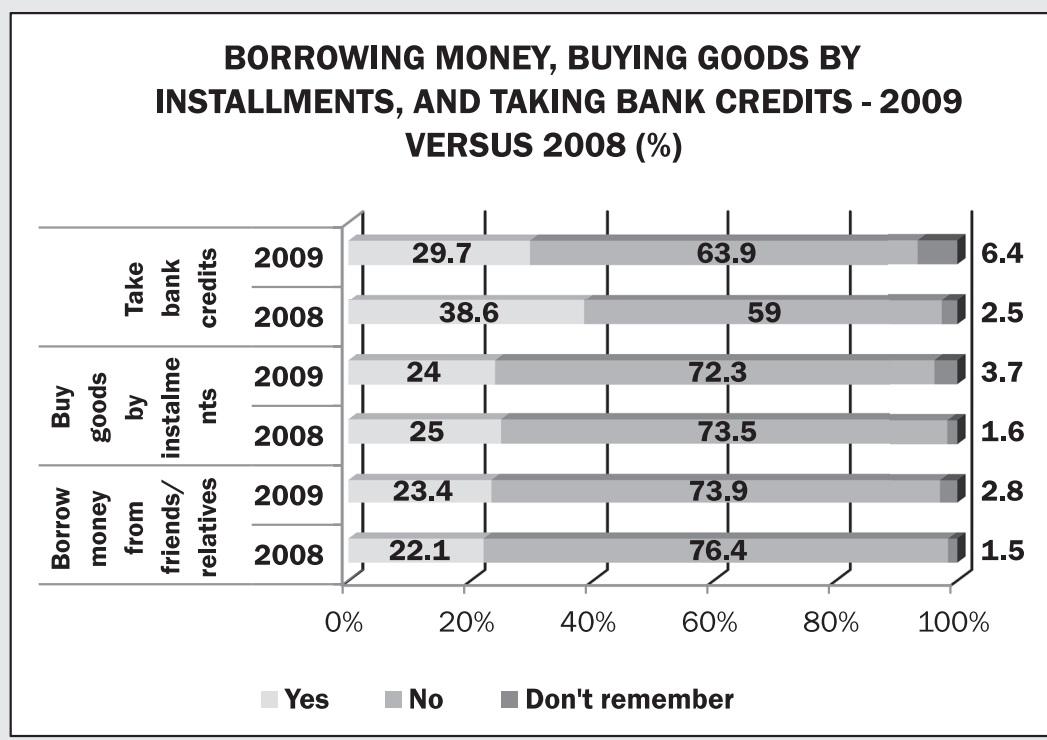
Changes in consumer behaviour were traced by several 4-point Likert-type questions. Respondents had to give answers in the continuum “agree-disagree”. Fig. 5 presents the results two dimensionally (agree-disagree). In the original version the questions were developed by the use of four dimensions (strongly agree- agree – disagree – strongly disagree).

The conclusions are obvious. A great proportion of Bulgarian households changed their consumer behavior in direction of purchasing carefully and looking for cheaper products. It is a disturbing result that in 2010 80% of Bulgarian households could not afford goods and services they could afford in 2009. As a reaction to economic crisis and despite the lower level of income as well as the higher prices 80% of Bulgarian households try to save money. This propensity to saving is not an indicator of richness – in fact this is

TABLE 3 Income change in 2010 – educational point of view

INCOME \ EDUCATION	PRIMARY SCHOOL	MIDDLE SCHOOL	COLLEGE	UNIVERSITY
Will decrease	16,40%	17,30%	17,20%	19,70%
Will remain the same	51,80%	40,60%	44,60%	45,80%
Will increase	22,70%	36,50%	36,90%	31,70%
No opinion	9,10%	5,60%	1,30%	2,80%
Total	100%	100%	100%	100%

FIGURE 4



a reaction to the fear from future and an attempt to prepare for the approaching “difficult days”.

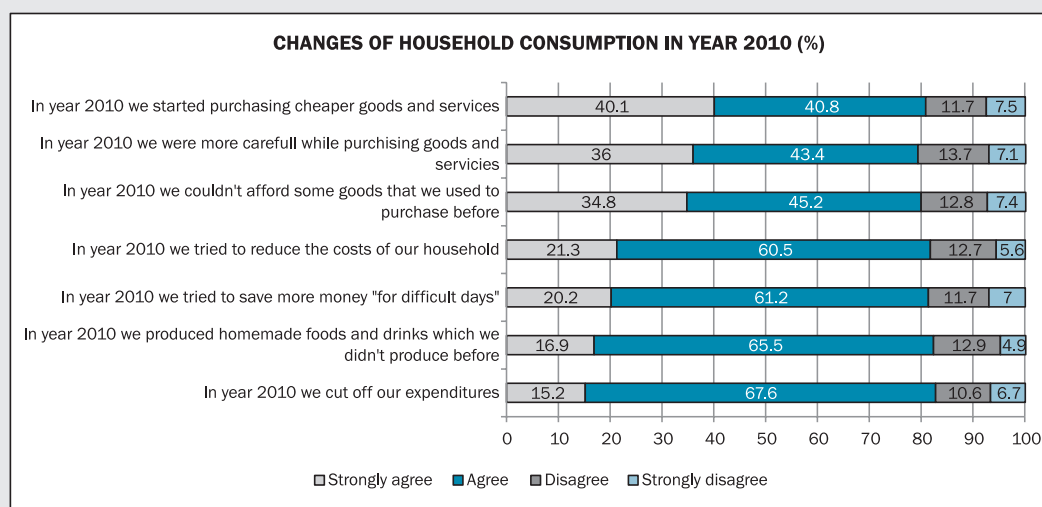
Another “tactic” for coping with economic difficulties (typical for Bulgarian consumer) is producing homemade foods and drinks – 82,3% of Bulgarian households confirm that in 2010 they have produced homemade foods and drinks that they produced never before.

5. CONCLUSIONS AND GUIDELINES FOR FUTURE RESEARCH

Data analysis shows that Bulgarian consumers have changed the frequency of consumption of some major products. These product categories include meat, fish, fruits, etc.

In times of economic crisis Bulgarian consumers vastly reduce the consumption of entertainment, clothes, and shoes. There is also a significant decrease of consumption of electricity, heating and food.

FIGURE 5



There is an obvious difference between expectations of people living in Sofia and expectations of people living in other cities and villages towards the future consumption of major product categories. The conclusion that can be derived is that households living in small towns and villages are more pessimistic in their expectations. These households expect huge reductions in consumptions of electricity, water, heating, food, clothes, shoes, and entertainment.

It is an interesting fact revealed by the research project that households situated in Bulgarian villages expect smaller reduction of consumption of clothes, shoes and entertainment compared to households living in other Bulgarian cities (except the regional centers). We can explain this phenomenon with the low initial consumption of households situated in Bulgarian villages and that's why the expected decrease is as considerable as the expected decrease in Sofia and other Bulgarian cities.

Research data also shows that respondents without serious education are less optimistic about their future income.

About 80% of Bulgarian households try to cope with the economic difficulties by purchasing carefully and looking for cheaper products. Over 80% of Bulgarian households declare a higher propensity to saving in times of economic crisis. The idea standing behind this propensity to saving is the desire to save money for "difficult days". Another typical Bulgarian behavior in times of economic crisis is the increase production of homemade foods and drinks.

And finally, a decrease of the number of people who take bank credits is observed.

This paper could be continued by other publications that could present detailed data about: changes of consumer behavior in Bulgaria concerning the durable goods, changes of consumer behavior and consumer attitudes towards credits and deposits; change of amount and variety of "homemade" products produced by Bulgarian households in conditions of economic crises (compared to the times before the crisis); educational, gender and other demographic aspects of consumer behavior in times of economic crisis.

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Rezime

Empirijsko istraživanje uticaja ekonomske krize na ponašanje potrošača u Bugarskoj – Promene u trošenju, štednji i uzimanju bankarskih kredita

Hristo Katrandjiev

Ovaj rad predstavlja rezultat istraživanja tržišta na osnovu upitnika sprovedenog među domaćinstvima u Bugarskoj. Autor studije nastoji da objasni promene koje se javljaju u ponašanju potrošača u vreme ekonomske krize u Bugarskoj, da li potrošači menjaju svoje obrasce kupovine, kako potrošači pokušavaju da izbegnu ili minimiziraju negativne rezultate ekonomske krize itd. Istraživanje je planirano,

organizovano i realizovano u okviru Naučno-istraživačkog programa Univerziteta nacionalne i svetske ekonomije u Sofiji, Bugarska. Ovaj rad obrađuje samo deo rezultata istraživanja i analize. Ostali rezultati će biti publikovani u posebnim radovima.

Ključne reči: ponašanje potrošača, ekonomska kriza, potrošnja

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